

**FIG. 3A**

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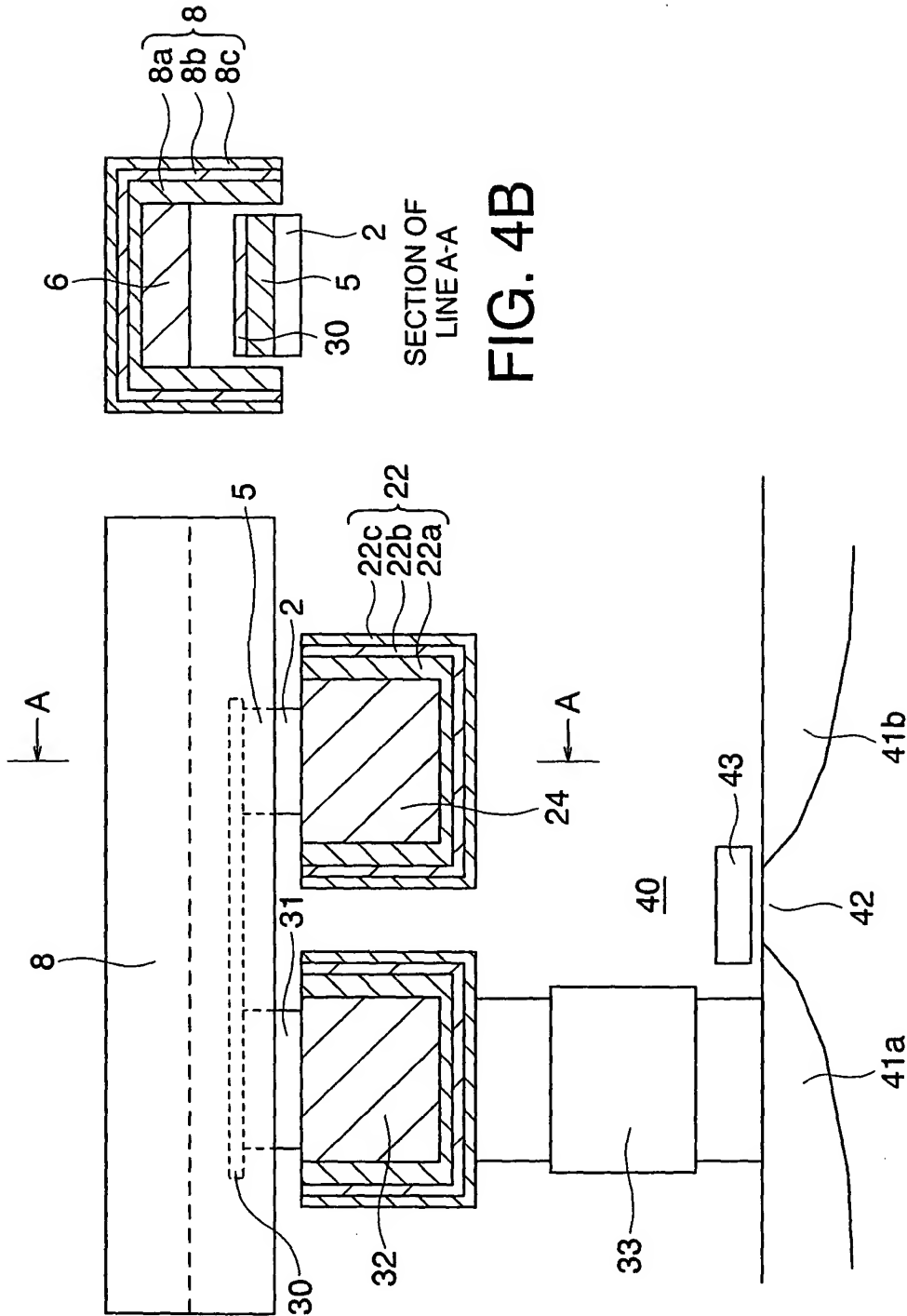


FIG. 4A

FIG. 4B

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FIG. 5A

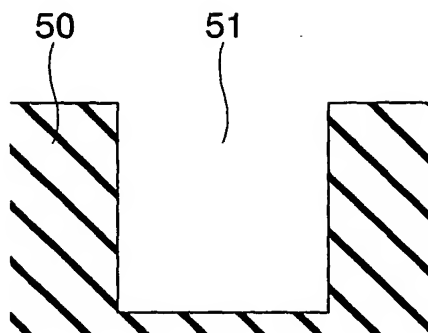


FIG. 5B

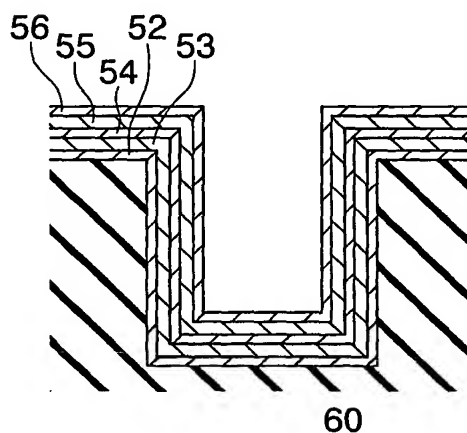


FIG. 5C

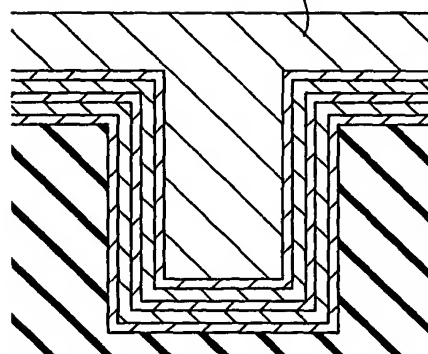
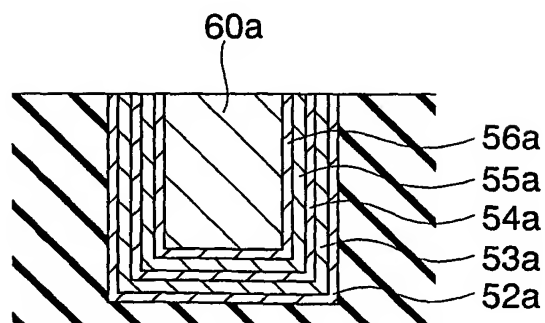


FIG. 5D



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FIG. 6A

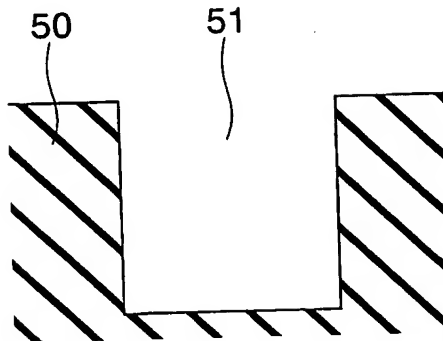


FIG. 6B

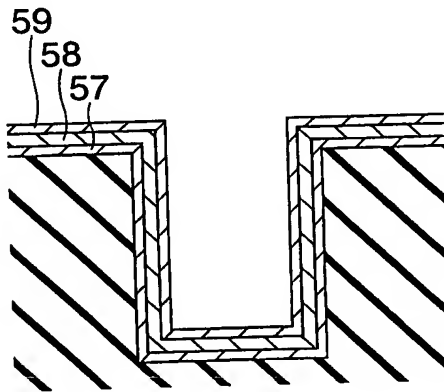


FIG. 6C

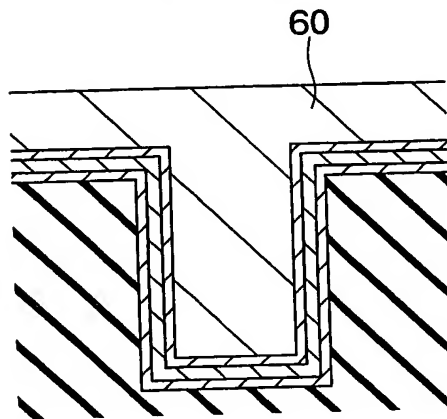
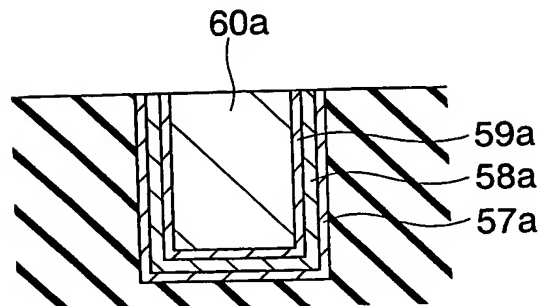


FIG. 6D



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FLUCTUATIONS IN SWITCHING MAGNETIC FIELD  $dH_c$   
AND OFFSET MAGNETIC FIELD  $dH_{off}$

	YOKE STRUCTURE	$dH_c$ (Oe)	$dH_{off}$ (Oe)
EXAMPLE 1	$Ni_{80}Fe_{20}/Ta/Ni_{80}Fe_{20}$	8.9	7.3
MODIFIED EXAMPLE	$CO_{70.5}Fe_{4.5}Si_{15}B_{10}/Ta/Ni_{80}Fe_{20}$	8.1	6.6
COMPARATIVE EXAMPLE 1	$Ni_{80}Fe_{20}$	19.4	20.3
COMPARATIVE EXAMPLE 2	$CO_{70.5}Fe_{4.5}Si_{15}B_{10}$	16.4	18.3

FIG. 7

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FIG. 8A

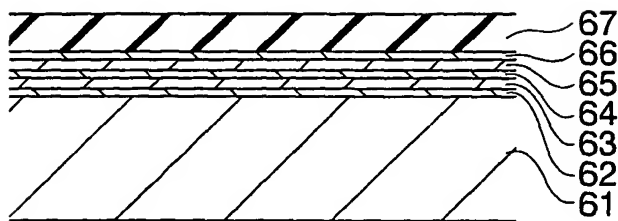


FIG. 8B

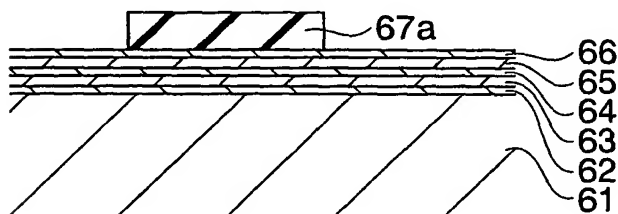


FIG. 8C

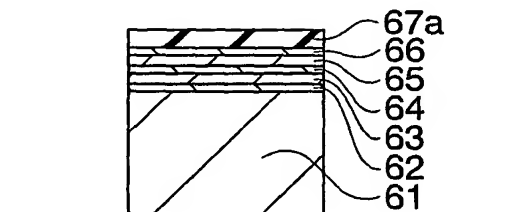


FIG. 8D

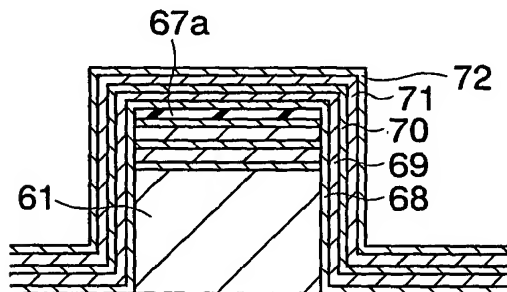
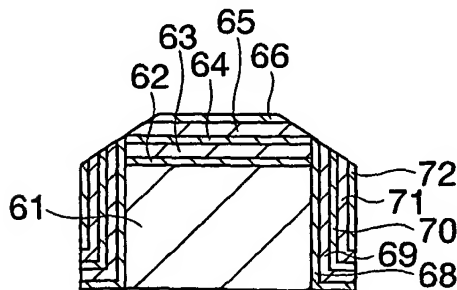


FIG. 8E





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FLUCTUATIONS IN SWITCHING MAGNETIC FIELD  $dH_c$   
AND OFFSET MAGNETIC FIELD  $dH_{off}$

	YOKE STRUCTURE	$dH_c$ (Oe)	$dH_{off}$ (Oe)
EXAMPLE 2	$Ni_{81}Fe_{19}/Ta/Ni_{81}Fe_{19}$	8.2	7.8
MODIFIED EXAMPLE	$Ni_{81}Fe_{19}/Ta/CO_{87}Nb_5Zr_8$	7.8	8.1
COMPARATIVE EXAMPLE 1	$Ni_{81}Fe_{19}$	17.6	18.3
COMPARATIVE EXAMPLE 2	$CO_{87}Nb_5Zr_8$	17.7	19.1

FIG. 9

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FIG. 10A

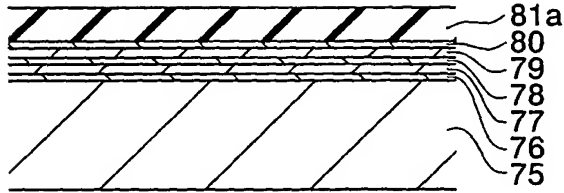


FIG. 10E

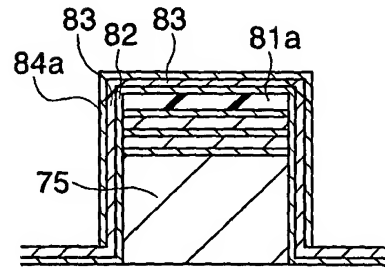


FIG. 10B

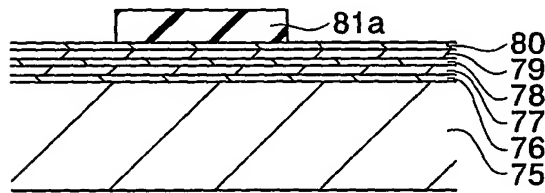


FIG. 10F

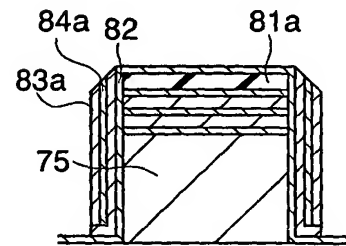


FIG. 10C

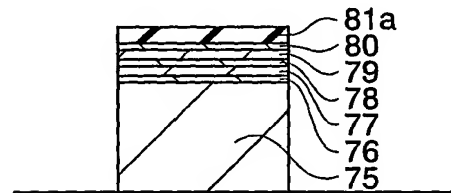


FIG. 10G

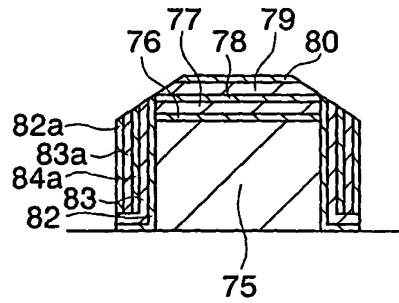
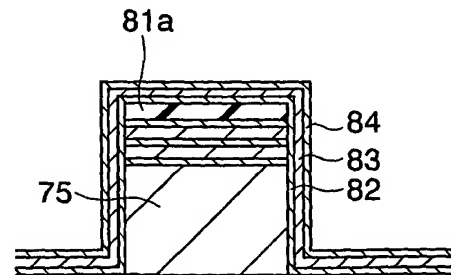


FIG. 10D



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FLUCTUATIONS IN SWITCHING MAGNETIC FIELD  $dH_c$   
AND OFFSET MAGNETIC FIELD  $dH_{off}$

	YOKE STRUCTURE	$dH_c$ (Oe)	$dH_{off}$ (Oe)
EXAMPLE 3	$Ni_{81}Fe_{19}/Ta/Ni_{81}Fe_{19}$	9.4	8.1
MODIFIED EXAMPLE	$Ni_{81}Fe_{19}/TaN/Fe_{90}Cu_1Zr_7B_2$	7.7	9.1
COMPARATIVE EXAMPLE 1	$Ni_{81}Fe_{19}$	18.1	17.9
COMPARATIVE EXAMPLE 2	$Fe_{90}Cu_1Zr_7B_2$	13.2	15.9

FIG. 11

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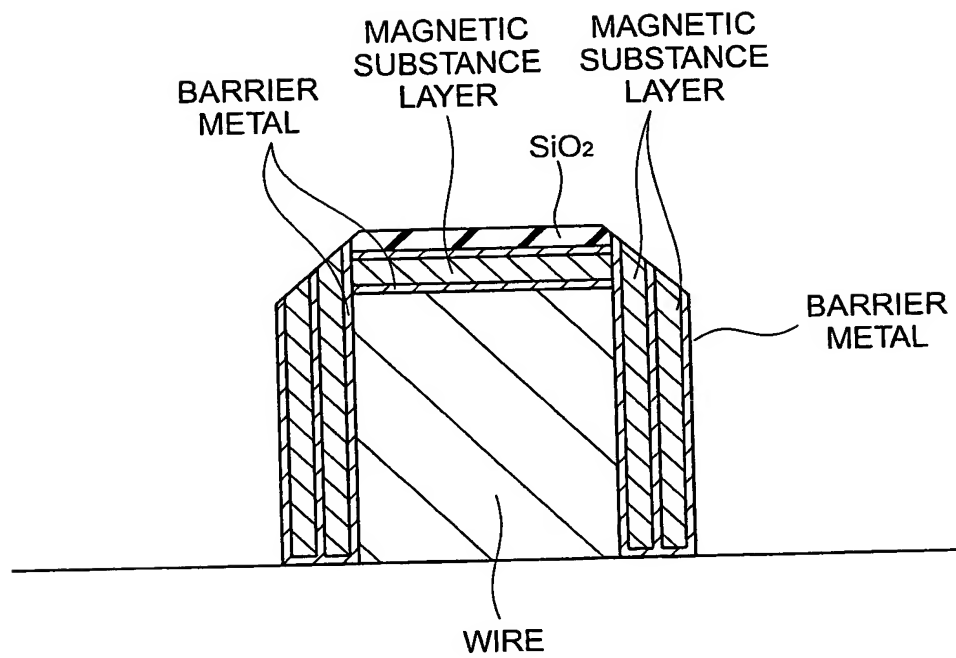
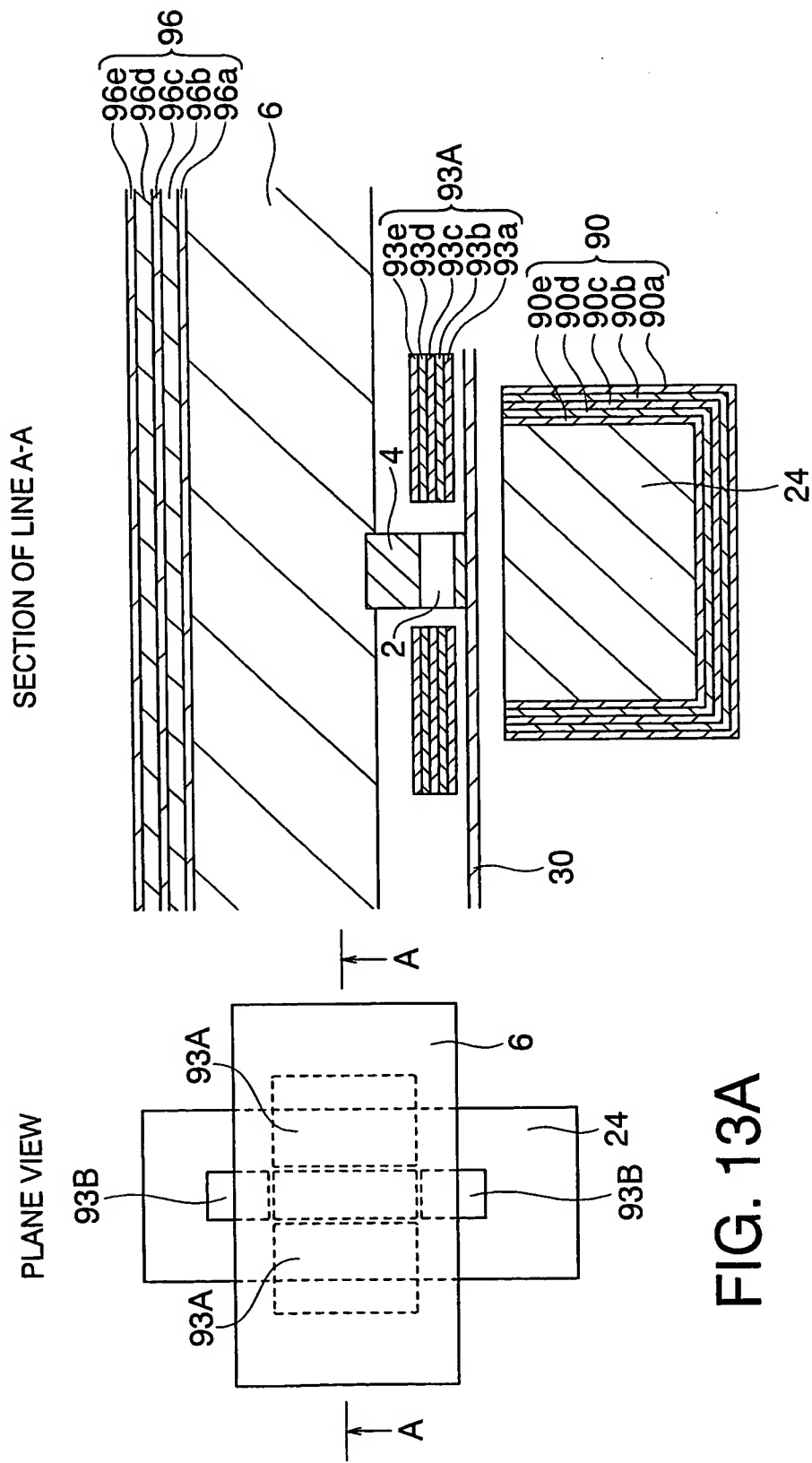


FIG. 12



FLUCTUATIONS IN SWITCHING MAGNETIC FIELD dH<sub>c</sub>  
AND OFFSET MAGNETIC FIELD dH<sub>off</sub>

	YOKE STRUCTURE	dH <sub>c</sub> (Oe)	dH <sub>off</sub> (Oe)
EXAMPLE 4	Ni <sub>81</sub> Fe <sub>19</sub> /Ta/Ni <sub>81</sub> Fe <sub>19</sub>	8.2	7.8
MODIFIED EXAMPLE	Ni <sub>81</sub> Fe <sub>19</sub> /TaN/Co <sub>87</sub> Nb <sub>5</sub> Zr <sub>8</sub>	8.5	7.4
COMPARATIVE EXAMPLE 1	Ni <sub>81</sub> Fe <sub>19</sub>	17.8	16.3
COMPARATIVE EXAMPLE 2	Co <sub>87</sub> Nb <sub>5</sub> Zr <sub>8</sub>	15.4	18.3

FIG. 14

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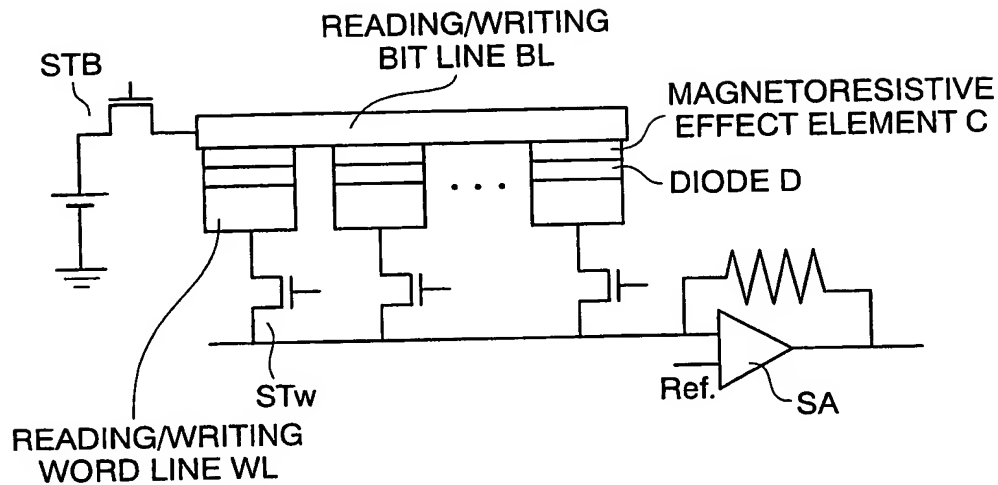


FIG. 15

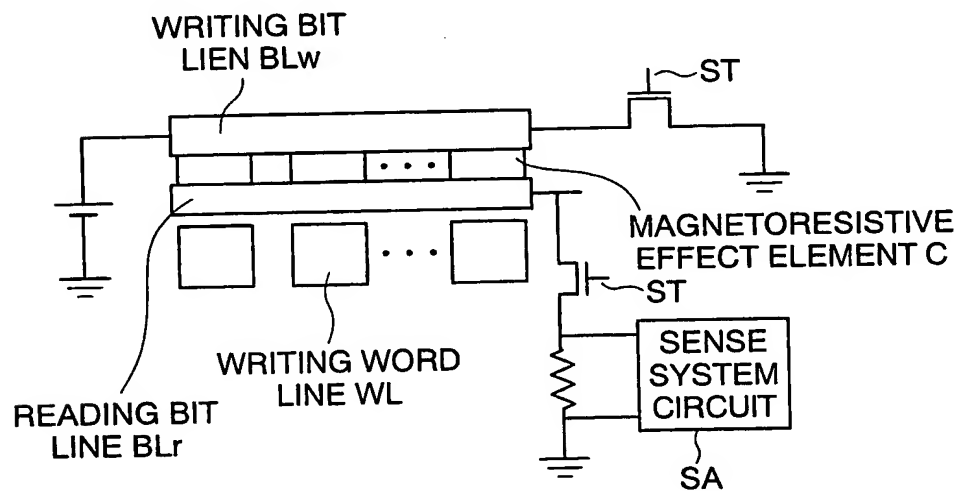


FIG. 16

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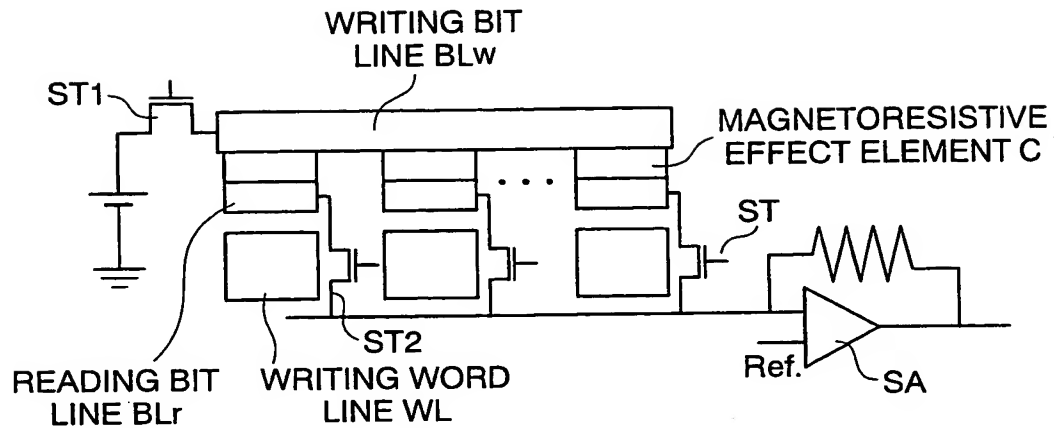


FIG. 17

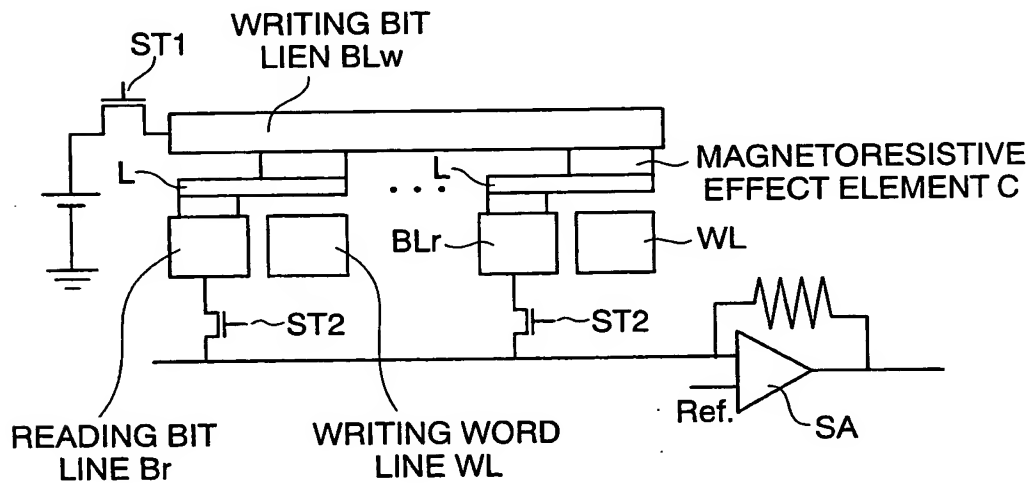


FIG. 18



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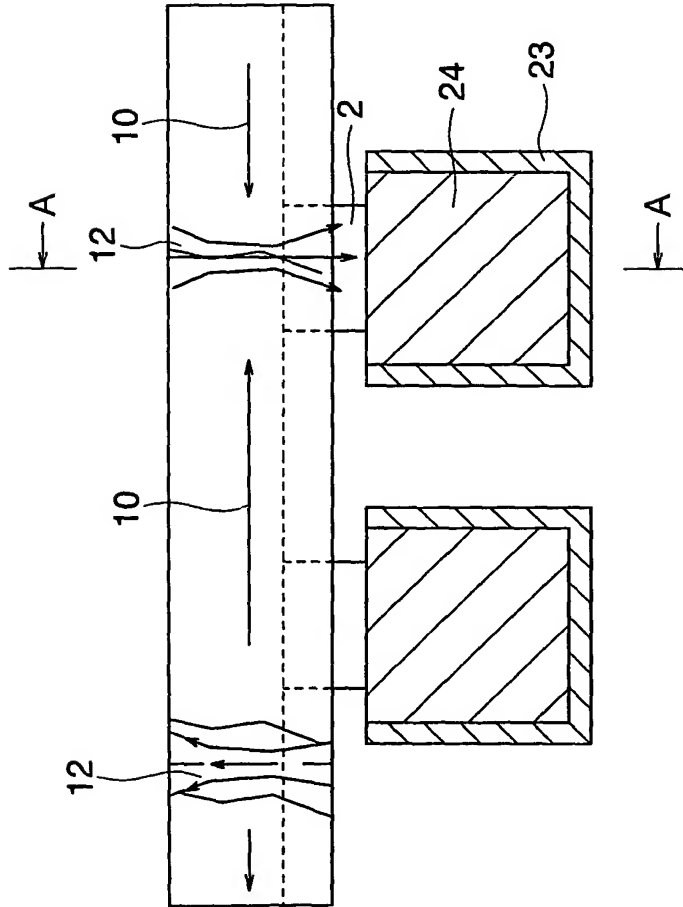


FIG. 19A

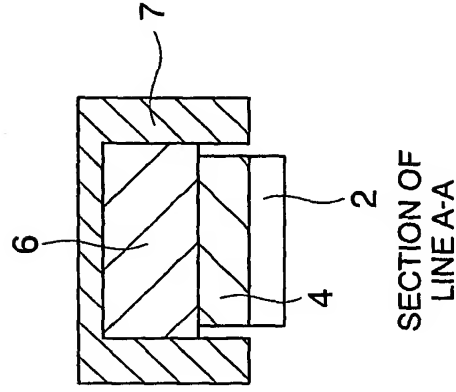


FIG. 19B